

IN THE CLAIMS:

Further, before taking any further action in this case, please amend the claims as follows.

1. (Currently Amended) A method for performing layer extraction from multiple images containing reflections and transparencies, comprising:

computing a primary motion estimate, wherein computing the primary motion estimate includes computing a dominant motion for the sequence using image alignment against a current min-composite;

estimating a primary layer associated with the primary motion estimate, wherein estimating the primary layer includes computing a difference image calculation between stabilized images and the min-composite;

computing a secondary motion estimate, wherein computing the secondary motion estimate includes computing non-dominant motion by aligning the difference image calculation with a max-composite of the images;

estimating a secondary layer associated with the secondary motion estimate; and

iteratively refining lower and upper bounds on the primary and secondary layers to estimate the primary and secondary layers.

2. (Original) The method of claim 1, further comprising improving the motion estimates using motion re-estimation.

3. (Original) The method of claim 1 further comprising stabilizing the images with respect to the primary layer.

4. (Original) The method of claim 3, further comprising aligning the images against a current min-composite and computing a difference image

calculation between the stabilized images and the min-composite to produce the initial layer estimate.

5. (Original) The method of claim 1, wherein estimating the layers includes using constrained least squares to optimally recover the layer images.

6. (Original) The method of claim 3, wherein iteratively refining includes recovering the primary layer and the secondary layer of the images.

7. (Original) The method of claim 1, wherein the multiple images form a video sequence containing reflections and transparencies.

8. Cancelled.

9. (Currently Amended) The method of claim [[8]]1, further comprising using initial layer estimates of the dominant and non-dominant motion estimates and improving the motion estimates using motion re-estimation and computing unconstrained least-squares as an initial value and using positivity constraints to solve a quadratic related to the layer extraction.

10. (Original) The method of claim 5, further comprising alternating the least-squares optimization of layer values with motion re-estimation.

11. (Currently amended) The method of claim 10, further comprising computing [[the]] an unconstrained least-squares solution and using the result of the least squares computation as the initial value and solving the quadratic-programming problem with positivity constraints.

12. (Original) A computer-readable medium having computer-executable instructions for performing the method recited in claim 1.

Claims 13-20 cancelled.

21. (Previously Presented) The method of claim 1 wherein the upper and lower bounds are refined by the process actions of:

aligning the images against a current minimum composite;  
computing a difference image calculation between the images and the minimum composite; and  
aligning the difference image calculation with a maximum composite of the images.

22. (Previously Presented) The method of claim 21, further comprising continually performing the method a predefined amount to iteratively refine lower and upper bound parameters of the images.

23. (Previously Presented) The method of claim 21, computing unconstrained least-squares as an initial value and using positivity constraints to solve a quadratic related to the extracted images.

24. (Previously Presented) A computer-readable medium having computer-executable instructions for performing the method recited in claim 21.

25. (Previously Presented) The method of claim 5 wherein using constrained least squares to optimally recover the layer images, comprises:

using known motion parameters to compute a preconditioned conjugate gradient without constraints to determine gradient parameters; and  
estimating the components based on the gradient parameters.

26. (Previously Presented) The method of claim 25, further comprising using positivity constraints to solve a quadratic related to the extracted images.

27. (Previously Presented) The method of claim 26, wherein the motion parameters are determined by computing a dominant motion for the sequence using image alignment against a current min-composite; computing a difference image calculation between stabilized images and the min-composite; and computing non-dominant motion by aligning the difference image calculation with a max-composite of the images.

28. (Presently Presented) A computer-readable medium having computer-executable instructions for performing the method recited in claim 25.